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ABSTRACT

The effects of emotional role playing on interpersonal attitudes toward the disabled are explored. Three treatment groups (role players, vicarious role players, and controls) were involved. Role playing consisted of traveling about the campus in a wheel chair for an hour. Results indicated that, compared to the control experience, both direct and vicarious emotional role-playing led to more positive responses: (1) to a specific disabled person; (2) to a series of issues concerning disabled students in general; and (3) to a disguised attitudinal measure given by telephone four months later. The concept of empathy appeared more adequate than dissonance for understanding the results. The potential of role playing and vicarious experience for increasing tolerance and social maturity is considered. (Author/TL)

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EMOTIONAL ROLE PLAYING, ATTITUDE CHANGE, AND ATTRACTION TOWARD A DISABLED PERSON[1]

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(Abstract)

An experiment explored the effects of emotional role playing on interpersonal attitudes toward the disabled. The role playing consisted of travelling about the campus in a wheel chair for an hour, and the design involved three treatment groups (Role Players, Vicarious Role Players, and Controls). Ccmpared to the control experience, both direct and vicarious emotional role playing led to more positive responses: (1) to a specific disabled person (the experimenter), (2) to a series of issues concerning disabled students in general, and (3) to a disguised attitudinal measure given by telephone four months later. The concept of empathy appeared more adequate than dissonance for understanding the results. The potential of role playing and vicarious experience for increasing tolerance and social maturity was considered.

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EMOTIONAL ROLE PLAYING, ATTITUDE CHANGE, AND ATTRACTION TOWARD A DISABLED PERSON[1]

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According to Sarbin (1968) and other role theorists the technique of role playing is an affective agent of attitude and behavior change. Although little systematic research has been conducted to assess the effects of role playing, several pieces of anecdotal evidence are intriguing: (1) A Los Angeles area police department instituted a role playing program to give its recruits empathy for those they arrest. The policemen learned what it is like to spend the night in jail, played the role of a bum on skid row, and enacted the hippie role at a city park (Newsweek, December 15, 1969). (2) Another example of role playing was reported by John Howard Griffin, a free-lance writer who artificially pigmented his skin and, appearing to be black, toured the South by bus. In his book, Black Like Me, he records his experiences and the ways in which he began to conform to the expectations that others had of blacks (Griffin, 1960). (3) Some speech pathology departments have found it useful for students of speech therapy to play the role of a stutterer.[4] By stuttering when waited on in stores and other public places, students get intense first-hand knowledge of the social problems encountered by their patients. (4) Recently, a grade school teacher in Iowa taught her third grade students about prejudice by segregating them into brown- and blue-eyed groups. By turns each group spent a whole day in the role of inferiors. Reportedly, the role playing was an intense experience for the children, but the nature of the effects have not been objectively assessed (Peters, 1971).

In each of the examples cited, the object of the role playing seems to have been the same--to create empathy for stigmatized others. The experience appears to be capable of producing significant and lasting changes in one's perception of the stigmatized role, but until such consequences are studied, exactly what changes occur remains obscure.

Mann and Janis (1968) have previously reported research on emotional role playing as a technique of inducing fear. They had college women who were heavy smokers play the role of cancer victims. For an hour each subject pretended to be a patient, while the experimenter played the physician's role. The physician showed the patient a chest x-ray and informed her that she had lung cancer. Together they acted out several scenes in the doctor's office, focusing on the pain of the illness, hospitalization, and early death. Later these subjects were compared to a second group that heard a tape recording of one of the role playing sessions. In comparison with an untreated control group, the role playing and passive control groups both reported smoking significantly fewer cigarettes per day when interviewed by telephone 18 months later. Mann and Janis thus demonstrated that subjects' feelings of invulnerability to cancer could be broken down through emotional role playing, and that the consequent fear could motivate changes in self-reported smoking behavior.

The present research also investigated emotional role playing, but its focus was the creation of empathy rather than fear. The study grew out of repeated attempts to find objective evidence for Goffman's (1963) observation that people sometimes talk too loudly to physically disabled and other stigmatized individuals.[5] In three different studies the voice loudness data taken from taped conversations proved rather uninformative. However, some provocative comments were made by our stooges after they feigned disability or blindness in the experiments. Some of their remarks suggested that a

convincing enactment of the disabled role might have greater impact on the role player himself than on those he encounters.

In this experiment subjects were asked to spend an hour on the campus in a wheel chair, and we hypothesized that the experience would have a positive effect on their attitudes (1) toward a specific disabled individual as well as (2) on issues involving disabled people generally. In addition, subjects in a second group were asked merely to observe the role player's experience. Mann and Janis had found that passive exposure to emotional role playing was effective in reducing smoking, and on this basis we hypothesized that the interpersonal attitudes of observers as well as those of role players would be affected. Some previous work has been reported on the effects of such vicarious experiences. Berger (1962) has shown that the galvanic skin response can be elicited if a subject merely believes that someone else is being shocked. Also, Stotland (1969) has investigated palmer sweating and heart rate changes as measures of empathy. His subjects watched others receive either painful or pleasurable sensations, and they displayed more physiological responsiveness when they attempted to empathize with the other person than when simply watching him.

Method

Seventy-six University of Illinois students (31 male, 45 female) served as subjects. They were randomly selected by computer within available hours from an introductory psychology pool. After reporting to the experimental room in groups of six, they were randomly assigned to one of three conditions--Role Playing, Vicarious Role Playing, or Control. The experimenter was a female graduate student who appeared in a wheel chair.

Experimental Conditions

Printed instructions asked each subject in the Role Playing group to play

the role of a person confined to a wheel chair. The subject was to imagine that he had recently been in an automobile accident which had severed the lower part of the spinal cord leaving his legs permanently paralyzed. He was asked to pretend that it was the first day back on campus after the accident. A 25-minute wheel chair trip was then outlined that consisted of going from the fourth floor of the Psychology Building to the basement of the Student Union. There he was to buy a cup of coffee or a coke, to drink it at one of the tables in the snack bar, and finally to return to the laboratory. The experience involved a hundred yards of slightly uphill sidewalk, four elevator rides, several ramps and doors, and a complicated procedure for getting coffee.

The instructions for the Vicarious Role Playing condition asked the subjects to walk behind the Role Players at a distance of 20 feet. They were informed about the role being played by those in the wheel chair including the details of the auto accident. The task of the Vicarious Role Player was to observe the Role Players' experiences, doing everything he did; however he was not to interact with him, ride in the same elevator, or help him in any way.

Finally, the Control subjects were merely asked to spend an equivalent amount of time (25 minutes) walking on the campus and having coffee at a different specified location. All of the subjects including the controls were asked to tell friends they happened to encounter, that they were in an experiment and would explain later. Six subjects who refused to take the wheel chair role were given the control instructions instead, but being self-selected members of the control group their data were not included in the analyses.

Dependent Measures

After returning from their routes, the subjects were given a blank sheet of paper and asked to describe their experience in 100 words. The experimenter

still in her wheel chair, then gave them the three sets of rating scales described below, asking them to rate their feelings during the experiment, their attitudes toward problems involving disabled students, and their evaluation of the experimental procedures and the apparently disabled investigator.

Content analysis. The 100-word descriptions were content analyzed as one measure of the emotional response of the subjects to their experiences. Two raters[6] independently scored all of the descriptions by counting the number of clauses with emotional verbs, modifiers, descriptive statements, and nouns. The overall score was simply the sum of the scores in each category. The results from the two scorers were averaged.

Affective rating scales. There were 20 seven-point semantic differential-type items intended to tap the affective character of their experience. At the top of the page was the phrase "During this experiment I felt.", and beneath the heading were 20 items composed of five potency and five evaluative items from Osgood, Suci, and Tannebaum (1957) along with five anxiety (e.g., tense-relaxed, anxious-calm, etc.) and five empathy items (e.g., apathetic-compassionate, concerned-indifferent, etc.) that were rationally derived for this study.

Attitude scale. Next, subjects filled out a Survey of Attitudes composed of 12 six-point items constructed especially for this study. The questions included such topics as the following: whether to require new students to attend an orientation session about the Rehabilitation Center, whether to include lectures on the disabled in Introductory Psychology, whether to favor foreign students or students confined to wheel chairs in giving new scholarships, and whether the approval of the Rehabilitation Center should be required

on the plans for new campus buildings. Responses to the items were summed to yield an attitude measure with a possible range of from 12 to 60.

Demand and attraction measures. Finally, subjects were told that the session was finished, but before leaving they were given an Experimental Evaluation Form which was to be filled in, sealed in an envelope, and deposited in the mail shute in the supervising professor's office door. The form consisted of two parts. The portion assessing the demand characteristics of the experiment asked the subject to state the hypothesis under study and also asked on a seven-point scale how strongly he felt that he had been expected to indicate sympathetic or unsympathetic attitudes toward handicapped students. The attraction part of the form asked how much the subject liked the experimenter (who appeared to be confined to a wheelchair). The attraction scales were presented as a confidential communication intended only for the supervising professor. They consisted of three seven-point scales asking how much the subject would like (or dislike) being in a different study with the same experimenter, how much the experimenter impressed him as a pleasant (or unpleasant) person, and finally what grade she should get for her performance as experimenter (from A to E). As a check on the validity of these previously unused attraction items, a subset of 54 subjects also answered a two-item measure of attraction taken from Byrne's Interpersonal Judgement Scale (1961). These two seven-point scales asked how much the subject liked (or disliked) the target person and how much he would enjoy (or dislike) working with her in an experiment.

Volunteering. A month after the experiment, the subjects were telephoned by a bogus representative of a well known campus service organization. He requested volunteers to help show prospective students who were handicapped around the campus for an hour.

Follow-up attitude measure. Near the end of the subsequent semester, four months after the experiment, the follow-up attitude assessment was also conducted by telphone. A caller identifying herself as someone from the Undergraduate Students Association (UGSA) stated that she was sampling the student body to determine how they would favor spending leftover funds in the UGSA treasury. Subjects were asked to rate how they felt about each of four alternatives on a five-point scale. The alternatives were to spend the money on scholarships for black students, increased parking space, increased facilities for disabled students, and increased intramural sports facilities.

Results

The major analyses were a series of 2 X 3 X 2 analyses of variance with sex, treatment condition, and volunteering as the factors. Volunteering referred to whether or not the subject volunteered to show a disabled student around the campus when asked a month later.

Affect. A content analysis of the subjects' 100-word descriptions of their experience provided one measure of affective response. Although the interrater reliability was not high ($r = .55$), the analysis of variance yielded a significant treatment effect ($F = 4.88$, $p < .05$) accounting for 15% of the variance. A Scheffé's test with significance set at the .05 level showed that the Role Players ($M = 2.87$) were significantly different from the Controls ($M = 1.16$), but that the Vicarious group ($M = 1.95$), with an intermediate level of emotional response, was not significantly different from either of the other groups.

The second measure of affect was the set of affective rating scales. Table 1 shows the means and analyses of the responses to the scales. A significant treatment effect was found for the potency, anxiety, and empathy

scales but not for the evaluative scale. Generally, the Role Players said they felt weak, bad, anxious, and empathic after their experience. The

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Insert Table 1 about here

Vicarious Role Players, who merely observed those in the wheel chair, described their experience in similar terms. They felt slightly but not significantly less anxious, more negative, and more empathic than the Role Players. Only on the potency scale did the Vicarious Group resemble the Controls rather than the Role Players.

There were also sex differences accounting for 10% of the variance of the potency ($F = 10.95$, $p < .01$) and the anxiety scales ($F = 8.43$, $p < .01$). Females described themselves as both weaker and more anxious than did males.

Attitude. The analysis of variance of scores on the Survey of Attitudes concerning disabled students yielded a significant treatment effect ($F = 13.34$, $p < .001$) accounting for 25% of the variance. A Scheffe's test with significance set at the .05 level showed both the Role Playing ($M = 53.61$) and the Vicarious ($M = 50.29$) groups to be significantly different from the Control group ($M = 44.03$) but not different from each other. The means are displayed graphically in Figure 1.

The only other significant effect was for sex ($F = 9.06$, $p < .01$) accounting for 9% of the variance. The females ($M = 51.63$) were more favorable than the males ($M = 47.00$) on issues concerning disabled students.

Demand. The analysis of variance of responses to the seven-point scale asking how strongly subjects felt that they had been expected to indicate sympathetic or unsympathetic attitudes toward disabled students showed a significant effect only for the volunteering variable ($F = 6.56$, $p < .05$).

This effect accounted for 9% of the variance and reflected a tendency for subjects who later volunteered to show a disabled student around the campus (M = 5.60) to be less sensitive to the demands than those who did not volunteer (M = 6.26). A grand mean of 5.93 shows that in general all of the subjects felt that they were supposed to respond with sympathetic attitudes, but the absence of a treatment effect ($F < 1$) suggests that the obtained group differences in attitude were not due to differences in the perceived demand characteristics of the experiment.

Attraction. The analysis of variance of attraction ratings for the apparently disabled experimenter showed the treatments to be the only significant variable (F = 4.62, $p < .05$), accounting for 11% of the variance. A Scheffé's test with significance set at the .05 level shows that the Role Players (M = 18.86) were significantly different from the Control group (M = 16.97), but that the Vicarious group (M = 17.93), with an intermediate level of attraction, was not reliably different from either of the other groups. A graphic presentation of the results can be seen in Figure 1.

Insert Figure 1 about here

Attraction toward the disabled experimenter was only slightly related to responses to the more general Survey of Attitudes concerning disabled students (r = .26, $p < .05$) and was unrelated to the four month follow-up attitude assessment (r = .09, ns). For the subset of 54 subjects that also responded to the attraction items of the Interpersonal Judgment Scale (Byrne, 1961), the two attraction measares were highly correlated (r = .70, $p < .01$).

Volunteering. A month after the experiment was run, subjects were asked to show a prospective student who was disabled around the campus for

an hour. The overall volunteer rate was 58%. The Role Players and the Control subjects volunteered at approximately the same rate (63% and 68%), while the Vicarious group was least likely to volunteer (42%). However, a Chi square analysis shows that the groups did not differ significantly from each other in their tendencies to volunteer ($\chi^2 = 3.90$).

Follow-up. The results of the telephone survey taken four months after the experiment can be seen in Table 2. The table presents the mean ratings

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Insert Table 2 about here

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of the four possible uses for excess student funds. A significant treatment effect was found only on the item concerned with spending money on increased facilities for the disabled. The fact that the groups did not differ on the Black Scholarships, Intramural Sports, and Parking options, serves as discriminant validity for the obtained differences on the Facilities for the Disabled item. A graphic presentation of the responses to the critical item can be seen in Figure 1. A Scheffé's test with significance set at the .05 level shows that the means on that item for the Role Playing and the Vicarious conditions are not reliably different from each other and are both reliably different from the control condition. The Facilities for the Disabled item is correlated .22 ($df = 70$, $p < .10$) with the 12-item Survey of Attitudes concerning disabled students that was administered four months earlier at the time of the experiment.

Discussion

The results show that role playing a disabled person in a natural social environment has both immediate and long term effects on interpersonal attitudes

toward disabled students. Those who played the role of a disabled person by travelling around the campus in a wheel chair responded significantly more positively than Control subjects (1) to a specific disabled person (the experimenter), (2) to a series of issues concerning disabled students in general, as well as (3) to a disguised attitudinal assessment taken four months later. Subjects who experienced the role playing vicariously (by watching) displayed similar effects.

In addition to evidence from attitude and attraction measures, the subjects' open-ended descriptions of their role playing suggests the impact of the experience:

> I am surprised what effect this had on me. I was alone the entire time, I saw no one that I knew, so perhaps this made me take it all very seriously. All I know is that my eyes filled up with tears coming back up alone in that elevator.
>
> The looks that I received were very interesting and were consistently the same. People look out of the corner of their eyes and then a downward glance past my legs. They seemed a bit embarrassed.
>
> My arms had started to bother me and it was hard to go in a straight line. When I got to the ramp at the union, I started to go up and realized I was never going to make it.

Empathy

Some of the authors of the popular accounts of role playing reviewed in the introduction to this paper, frequently employed the term empathy. They felt that the primary effect of changing roles was to make the role player aware of a new perspective and to make him believe that he now knows what the other person feels. Although there are other possibilities (e.g., dissonance), empathy appears to be the most promising concept to account for the obtained results. Of all of the dependent variables assessed, the effect of the treatment conditions was greatest (accounting for 31% of the variance) on the 5-item self-report scale of empathy (Table 1). The Role Playing and Vicarious groups were almost identical in their empathy scores, both being significantly different from the Controls.

As a tentative framework for understanding the effectiveness of the experiment, we shall assume that the popular writers on the subject are correct in their suggestion that empathy is the key process in emotional role playing. Our subjects either directly or vicariously experienced feelings related to the anxiety, impotence, embarrassment, and exhaustion that they would have felt if they had really been experiencing their first day confined to a wheel chair. The processes at work in emotional role playing appear similar to those proposed by Bandura (1969) to account for observational learning. Presumably the direct and vicarious experience of role playing is associated with the salient elements of the situation. Like the behaviors in modeling, the emotional responses induced by role playing are then coded and stored to be retrieved when similar situations are presented (or cognitively represented) later.

Dissonance

The results of the present experiment are also compatible with predictions from dissonance theory. All three groups received the same course credit for participating in the experiment, but the Role Players underwent a much more embarrassing and effortful experience for it. Presumably the dissonance occasioned by going to much more effort than others for the same credit could be reduced by changing one's attitudes. Dissonance could be reduced by becoming more concerned about the needs of disabled people.

Zimbardo and Ebbesen (1970) have recently applied a dissonance explanation to role playing studies. They manipulated the effort involved in delivering counter-attitudinal speeches by exposing the speakers to delayed auditory feedback. Effortful role playing resulted in greater attitude change and a much higher volunteer rate to engage in a counter-attitudinal behavior. Zimbardo and Ebbesen conclude that the amount of attitude change in

role playing depends on the effort expended, but that principle does not appear to be at work in the present study. It is quite clear that the wheel chair subjects, who generally returned from their experience exhausted, expended much more physical effort than the Vicarious group. However, they did not differ significantly from each other on any of the attitude and attraction measures nor on the volunteering measure a month later.

While the effort hypothesis is contradicted by the data, a more generally stated dissonance interpretation is not completely ruled out. That is, although the Vicarious group had a physically easier task than the Role Players, they rated themselves as similarly anxious during the experience and some of them mentioned that it was embarrassing to walk slowly enough to stay 20 feet behind the wheel chair. Thus, if one assumed the tasks to be equally aversive a dissonance interpretation might still explain the effect.

Social Maturity

One of the crucial elements in social maturity is the ability to see things from more than one perspective. George Herbert Mead's (1934) concept of taking the role of the other refers to a process whereby one anticipates the actions of another person. Mead pointed out that children can play organized games with other children only after they have develped the role-taking ability. For example, a child can play the game of hide and seek only if as the hider he takes the role of the seeker into account and anticipates his actions. One of the interesting features of children's games is that sooner or later everyone is "it", that is, everyone gets experience in all of the roles.

A backlog of varied role experiences would seem to be essential to the development of the ability to change perspective that typifies social maturity. If that is true, then exposing individuals to a wide range of

experience (within the range of one's capacity to cope) is clearly a socially desirable end. However, if one listens to poets and novelists, many of the experiences that appear to make men wise and just involve tragedy, hardship, or loss, experiences that one would not quickly wish upon them. These considerations suggest that one is faced with being either safe-but-narrow-minded or wise-but-tortured. But an interesting possibility is that various artificial experiences (including engaging in role playing, seeing films and dramatic productions, and reading literature) enable the individual to know what it is like to be in situations which are beyond his realm of experience. It is conceivable that the effects of emotional role playing are similar to the beneficial effects that supposedly follow from a liberal education involving exposure to art, literature, drama, and other media for vicarious emotional experience.

Footnotes

1. This study was supported by Grant MH 14510-03 from the National Institute of Mental Health. Portions of this study were presented at a Symposium on Interpersonal Attraction, Midwestern Psychological Association, Detroit, May, 1971. Thanks are due Professor T. J. Nugent, Director, Division of Rehabilitation--Education Services, University of Illinois, for lending wheelchairs for the experiment. The data were analyzed by Dr. Howard McGuire and Ted Cottingham.

2. Reprints may be obtained from Gerald L. Clore, Department of Psychology, University of Illinois, Champaign, Illinois 61820.

3. Now at Stanford University

4. Personal Communication, Professor C. VanRiper of Western Michigan University.

5. Unpublished studies conducted in collaboration with Dr. Nancy Wiggins of the University of Illinois

6. The content analyses were done by Ted Cottingham and Charla Denton.

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Table 1

Affective Rating Scales

Means and Analyses of 5-item Scales Describing How the Subject Felt During the Experiment

Scales	Treatment Condition			Analyses of Variance			
	Role Playing	Vicarious	Control				
	M	M	M	df	MS	F	% variance
Potency	14.55	19.77	21.57	2/58	274.82	10.95***	25
Evaluation	21.24	20.54	22.93	2/58	31.40	2.55	4
Anxiety	22.07	21.31	16.92	2/58	159.29	4.39*	10
Empathy	25.62	25.86	18.14	2/58	397.28	14.42***	31

* p .05

*** p .001

Table 2

Four Month Telephone Follow-up

Means and Analyses of

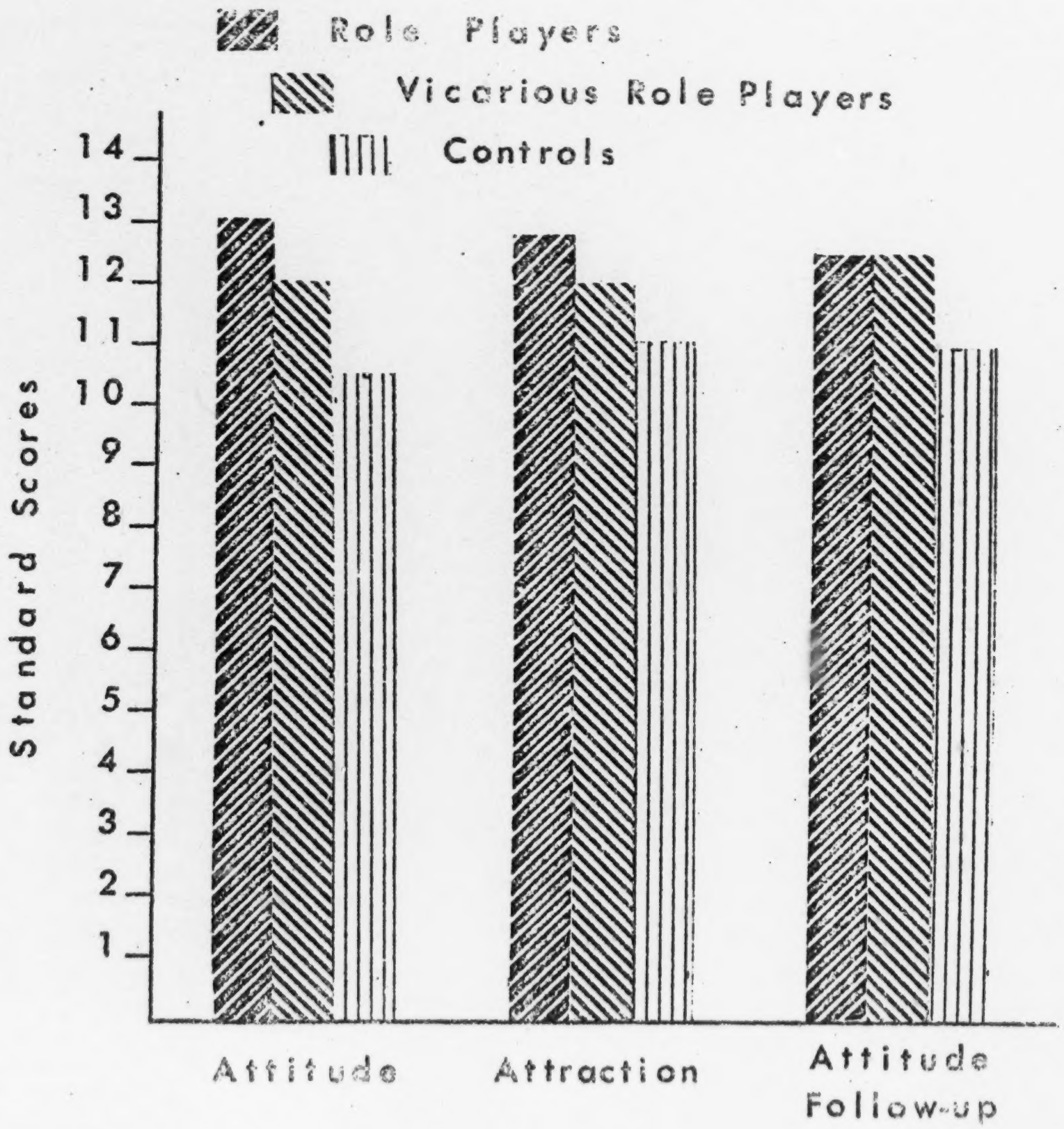
Ratings of Possible Uses for Student Funds

Uses for Funds	Treatment Condition			Analysis of Variance			
	Role Playing M	Vicarious M	Control M	df	ms	F	% variance
Black Scholarships	3.88	3.45	3.93	2/60	1.49	1.49	4
Intramural Sports	2.67	2.59	2.13	2/60	1.80	1.42	4
Facilities for Disabled	3.92	3.89	3.23	2/60	3.22	4.53*	12
Parking	3.10	3.40	2.56	2/60	3.81	1.63	5

* $p < .05$

Figure Caption

Figure 1: The relative effects of the treatment conditions on the three major dependent variables are shown. The data have been transformed into standard scores to allow meaningful comparisons across variables. To insure an accurate representation of the strength of the treatment effects, the mean was set at 12 and the standard deviation at 2, reflecting the relative magnitudes of the means and standard deviations found in the raw data.


Role Players
Vicarious Role Players
Controls
Standard Scores
14
13
12
11
10
9
8
7
6
5
4
3
2
1
Attitude
Attraction
Attitude
Follow-up